

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

### Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.61	05/06/2015 05/06/2015	Bob Duffey

LM Start		Rating **	A	Issue No.	1		
LM End		Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Operations & Maintenance Manuals				°		°
					°		°
DWR ID	DWR_MA0013_01_s _ 2013_1						
Action/Comments							
Inspector Comments: The LMA has the O&M manuals.							

No Photos

LM Start		Rating **	A	Issue No.	8		
LM End		Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Emergency Supplies & Equipment				°		°
					°		°
DWR ID	DWR_MA0013_01_s _ 2013_8						
Action/Comments							
Inspector Comments: The LMA has adequate flood fight supplies and equipment.							

No Photos

LM Start		Rating **	A	Issue No.	16		
LM End		Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Flood Preparedness & Training				°		°
					°		°
DWR ID	DWR_MA0013_01_s _ 2013_16						
Action/Comments							
Inspector Comments: The LMA completed flood fight training in 2014.							

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Cherokee Canal	Right	18.61	05/06/2015 05/06/2015	Bob Duffey

LM Start	0.57	Rating **	M	Issue No.	19
LM End	0.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.590173 °	39.590173 °
				-121.700617 °	-121.700617 °
DWR ID	DWR_MA0013_01_s_2013_19				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_19\_20150310\_00009.jpg



View of the vehicle erosion along the waterside slope.

LM Start	0.73	Rating **	M	Issue No.	12
LM End	0.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.587905 °	39.587505 °
				-121.700822 °	-121.700880 °
DWR ID	DWR_MA0013_01_s_2012_12				
Action/Comments					
Equipment					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_12\_20150310\_00006.jpg



View of the equipment along the landside toe of the levee.

LM Start	4.45	Rating **	M	Issue No.	47
LM End	5.35	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			39.536017 °	39.523020 °
				-121.707705 °	-121.707577 °
DWR ID	DWR_MA0013_01_s_2015_47				
Action/Comments					
Repair depressions or ruts in the crown or slope.					
Inspector Comments: Repair the ruts in the crown roadway.					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_47\_20150519\_00016.jpg



View of the ruts in the crown roadway.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Unit No. 01 Cherokee Canal	Right	18.61	05/06/2015 05/06/2015	Bob Duffey

LM Start	6.53	Rating **	M	Issue No.	2
LM End	6.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.507337 °	39.507337 °
				-121.715693 °	-121.715693 °
DWR ID	DWR_MA0013_01_s_2012_2				
Action/Comments					
Material					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_2\_20150310\_00001.jpg



View of a concrete block along the toe.

LM Start	9.70	Rating **	M	Issue No.	5
LM End	9.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.467170 °	39.466860 °
				-121.743887 °	-121.744108 °
DWR ID	DWR_MA0013_01_s_2012_5				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_5\_20150310\_00003.jpg



Trim the trees along the landside slope and toe.

LM Start	9.74	Rating **	M	Issue No.	10
LM End	9.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.466635 °	39.466635 °
				-121.744228 °	-121.744228 °
DWR ID	DWR_MA0013_01_f_2013_10				
Action/Comments					
Material					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_10\_20150310\_00005.jpg



View of a trailer &amp; material along the L/S toe.

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CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.61	05/06/2015 05/06/2015	Bob Duffey

LM Start	11.58	Rating **	M	Issue No.	11
LM End	11.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			39.442821 °	39.442738 °
				-121.759851 °	-121.759908 °
DWR ID	DWR_MA0013_01_f_2014_11				
Action/Comments					
Inspector Comments: 2011 - Small erosion pocket likely caused by irrigation diversion structure. 2013: Site is part of the extended inventory, last inspected 2011. [2013 Site ID: CHK_11-7_R]					

No Photos

LM Start	15.02	Rating **	A/W	Issue No.	45
LM End	15.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.405542 °	39.405542 °
				-121.800392 °	-121.800392 °
DWR ID	DWR_MA0013_01_f_2014_45				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_45\_20150310\_00012.jpg



View of the rodent hole on the waterside slope.

LM Start	17.09	Rating **	A	Issue No.	46
LM End	17.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.386423 °	39.386423 °
				-121.830107 °	-121.830107 °
DWR ID	DWR_MA0013_01_s_2015_46				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard sprayed the vegetation from the landside slope.					

Photo 1 of 1 : SP\_2015\_MA0013\_300\_46\_20150519\_00015.jpg



View of no vegetation on the landside slope.

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CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

### Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/12/2015 05/12/2015	Bob Duffey

LM Start	0.07	Rating **	M	Issue No.	1
LM End	0.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.573523 °	39.572455 °
				-121.701387 °	-121.702370 °
DWR ID	DWR_MA0013_02_s _ 2012_1				
Action/Comments					
Equipment					

No Photos

LM Start	3.88	Rating **	M	Issue No.	59
LM End	4.04	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			39.524802 °	39.526697 °
				-121.701262 °	121.699680 °
DWR ID	DWR_MA0013_02_s _ 2015_59				
Action/Comments					
Repair depressions or ruts in the crown or slope.					
Inspector Comments: Repair the ruts in the crown roadway.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_59\_20150519\_00023.jpg



View of the ruts in the crown roadway.

LM Start	3.90	Rating **	M	Issue No.	58
LM End	4.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.524973 °	39.526697 °
				-121.701005 °	-121.699677 °
DWR ID	DWR_MA0013_02_s _ 2015_58				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Repaire the landside slope erosion.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_58\_20150519\_00022.jpg



View of the landside slope erosion that was caused by the water overtopping the levee.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/12/2015 05/12/2015	Bob Duffey

LM Start	7.46	Rating **	M	Issue No.	60
LM End	8.20	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			39.503943 °	39.495120 °
				-121.716310 °	-121.724060 °
DWR ID	DWR_MA0013_02_s _ 2015_60				
Action/Comments					
Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comments: Repair the ruts in the crown roadway.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_60\_20150518\_00015.jpg



View of the ruts in the crown roadway.

LM Start	16.52	Rating **	A/W	Issue No.	54
LM End	16.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.409548 °	39.409548 °
				-121.789668 °	-121.789668 °
DWR ID	DWR_MA0013_02_f _ 2014_54				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_54\_20150310\_00012.jpg



View of the rodent holes and bait station along the waterside slope.

LM Start	18.87	Rating **	A	Issue No.	56
LM End	18.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.387780 °	39.387780 °
				-121.823445 °	-121.823445 °
DWR ID	DWR_MA0013_02_s _ 2015_56				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard sprayed the vegetation along the landside slope.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_56\_20150519\_00021.jpg



View of no vegetation on the landside slope.

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WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/12/2015 05/12/2015	Bob Duffey

LM Start	20.48	Rating **	M	Issue No.	6
LM End	20.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.372724 °	39.370732 °
				-121.846022 °	-121.850282 °
DWR ID	DWR_MA0013_02_s_2013_6				
Action/Comments					
Trim trees to at least five feet above ground level.					
Inspector Comments: Trim the trees 5 feet to allow visibility.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_6\_20150519\_00019.jpg



Trim the trees 5 feet to allow visibility along the landside slope.

LM Start	22.16	Rating **	M	Issue No.	8
LM End	22.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.359707 °	39.359707 °
				-121.872555 °	-121.872555 °
DWR ID	DWR_MA0013_02_s_2012_8				
Action/Comments					
Prunings					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_8\_20150310\_00004.jpg



View of the debris &amp; prunings.

LM Start	22.58	Rating **	M	Issue No.	7
LM End	22.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.356498 °	39.356303 °
				-121.879030 °	-121.879417 °
DWR ID	DWR_MA0013_02_s_2012_7				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 1 : SP\_2015\_MA0013\_301\_7\_20150310\_00003.jpg



View of the erosion along the canal.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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